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09/748,759	12/21/2000	Dana Blair	CISCP550	4515
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RITTER, LANG & KAPLAN 12930 SARATOGA AE. SUITE D1 SARATOGA, CA 95070				
			EXAMINER DAVIS, TEMICA M	
			ART UNIT 2681	PAPER NUMBER 8
DATE MAILED: 04/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/748,759

Applicant(s)

BLAIR ET AL.

Examiner

Temica M. Davis

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed February 2, 2004 have been fully considered but they are not persuasive. Applicant argues that Agrawal fails to disclose a mobile control function that maintains connection state information. The examiner, however, disagrees. In the previous office action, the examiner cited col. 8, lines 41-50 to show this limitation. In that section, Agrawal discloses protocols H.323 and H.245 used during call set-up and call establishment. The examiner should have also cited col. 5, lines 40-56 to give further explanation of these protocols. In that passage, it is taught that the H.323 protocol uses a RAS protocol in order to keep a connection alive by exchanging information periodically (which reads on maintaining connection state information).

For further clarity, Agrawal also teaches that when a mobile terminal is handing off from a serving base station to a target base station, call connection information is transferred between the base station in an effort to maintain the connection (col. 14, line 51-col. 15, line 26 and col. 19, lines 1-56).

Based on the above remarks, the rejection stands as set forth below.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2681

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Agrawal et al (Agrawal), U.S. Patent No. 6,628,943.

Regarding claims 1 and 33, Agrawal discloses in a data communication network for supporting mobile users, a method of operating a mobile control function, said method comprising: exchanging information with a mobile station via a radio access network according to a radio access network protocol (col. 5, lines 40-55, col. 7, lines 9-41); exchanging call control information with a call agent associated with a call of said mobile station (col. 7, line 42-col. 8, line 40); and maintaining connection state information for said mobile station while said mobile station is handled via said radio access network (col. 8, lines 41-50).

Regarding claims 2 and 34, Agrawal discloses the method of claims 1 and 33 further comprising: upon receipt of a handoff request from said radio access network, transferring responsibility for maintaining connection state information to another mobile control function (col. 18, lines 37-55).

Regarding claim 3, Agrawal discloses the method of claim 1 wherein exchanging call control information comprises exchanging call control information via an IP network (col. 18, lines 37-55).

Regarding claim 4, Agrawal discloses in a data communication network for supporting mobile users, a method of operating a call agent, said method comprising: exchanging call control information with a first mobile control function responsible for mobility management of a mobile station having a call handled by said call agent (col. 5, lines 40-55, col. 7, lines 19-41); and maintaining call state information for said mobile station (col. 8, lines 41-50).

Regarding claim 5, Agrawal discloses the method of claim 4 further comprising: upon a shift of responsibility for mobility management of said mobile station from said first mobile control function to a second mobile control function, exchanging call control information with said second mobile control function; continuing to maintain call state information for said mobile station while said second mobile control function maintains connection state information for said mobile station (col. 18, lines 37-55).

Regarding claim 6, Agrawal discloses the method of claim 4 wherein said call control information comprises an indication of an inbound call for said mobile station (col. 5, lines 40-55, col. 6, lines 32-43).

Regarding claim 7, Agrawal discloses the method of claim 4 wherein said call control information comprises an indication of a dialed call from said mobile station (col. 6, lines 1-19).

Regarding claim 8, Agrawal discloses the method of claim 4 wherein exchanging call control information comprises exchanging call control information via an IP network (col. 18, lines 37-55).

Regarding claim 9, Agrawal discloses for use in a data communication network for supporting mobile users, a computer program product for operating a mobile control function (col. 10, lines 7-62; figure 6), said product comprising code that causes a processor to exchange call control information with a first mobile control function responsible for mobility management of a mobile station having a call handled by said call agent (col. 5, lines 40-55, col. 7, lines 19-41); code that causes said processor to maintain call state information for said mobile station (col. 7, line 42-col. 8, line 40); and a computer-readable storage medium that stores the codes (figure 6).

Regarding claim 10, Agrawal discloses the computer program product of claim 9 further comprising code that, upon receipt of a handoff request from said radio access network, code causes said processor to transfer responsibility for maintaining connection state information to another mobile control function (col. 18, lines 37-55).

Regarding claim 11, Agrawal discloses the computer program product of claim 9, wherein said code that causes said processor to exchange call control information comprises code that exchanges call control information via an IP network (col. 18, lines 37-55).

Regarding claim 12, Agrawal discloses for use in a data communication network for supporting mobile users, a computer program product for operating a call agent (col. 10, lines 7-62; figure 6), said product comprising code that causes a processor to exchange call control information with a first mobile control function responsible for mobility management of a mobile station having a call handled by said call agent (col. 5, lines 40-55, col. 7, lines 19-41); code that causes said processor to maintain call state

information for said mobile station (col. 8, lines 41-50) and inherently computer-readable storage medium that stores the code (figure 6).

Regarding claim 13, Agrawal discloses the product of claim 12 further comprising: code that upon a shift of responsibility for mobility management of said mobile station from said first mobile control function to a second mobile control function, causes said processor to exchange call control information with said second mobile control function; and code that causes said processor to continue to maintain call state information for said mobile station while said second mobile control function maintains connection state information for said mobile station (col. 18, lines 37-55).

Regarding claim 14, Agrawal discloses the product of claim 12 wherein said call control information comprises an indication of an inbound call for said mobile station (col. 5, lines 40-55, col. 6, lines 32-43).

Regarding claim 15, Agrawal discloses the product of claim 12 wherein said call control information comprises an indication of a dialed call from said mobile station (col. 6, lines 1-19).

Regarding claim 16, Agrawal discloses the product of claim 12 wherein said code that causes said processor to exchange call control information comprises code that causes said processor to exchange call control information via an IP network (col. 18, lines 37-55).

Regarding claim 17, Agrawal discloses for use in a data communication network for supporting mobile users, an apparatus for operating a mobile control function, said method comprising: a processor that executes software; and a computer-readable

storage medium that stores said software, said software comprising (col. 10, lines 1-62; figure 6): code that causes said processor to exchange information with a mobile station via a radio access network according to a radio access network protocol (col. 5, lines 40-55, col. 7, lines 19-41); code that causes said processor to exchange call control information with a call agent associated with a call of said mobile station (col. 7, line 42-col. 8, line 40); and code that causes said processor to maintain connection state information for said mobile station while said mobile station is handled via said radio access network (col. 1, lines 41-50).

Regarding claim 18, Agrawal discloses the apparatus of claim 17 wherein said software further comprises: code that, upon receipt of a handoff request from said radio access network, that causes said processor to transfer responsibility for maintaining connection state information to another mobile control function (col. 18, lines 37-55).

Regarding claim 19, Agrawal discloses the apparatus of claim 17 wherein said code that exchanges call control information comprises code that exchanges call control information via an IP network (col. 8, lines 37-55).

Regarding claim 20, Agrawal discloses for use in a data communication network for supporting mobile users, apparatus for operating a call agent, said apparatus comprising: a processor that executes software; a computer-readable storage medium that stores said software, said software comprising (col. 10, lines 1-62; figure 6): code that causes said processor to exchange call control information with a first mobile control function responsible for mobility management of a mobile station having a call handled by said call agent (col. 5, lines 40-55, col. 7, line 19-col. 8, line 40); and code



that causes said processor to maintain call state information for said mobile station (col. 8, lines 41-50).

Regarding claim 21, Agrawal discloses the apparatus of claim 20 wherein said software further comprises: code that upon a shift of responsibility for mobility management of said mobile station from said first mobile control function to a second mobile control function, causes said processor to exchange call control information with said second mobile control function; and code that causes said processor to continue to maintain call state information for said mobile station while said second mobile control function maintains connection state information for said mobile station (col. 18, lines 37-55).

Regarding claim 22, Agrawal discloses the apparatus of claim 20 wherein said call control information comprises an indication of an inbound call for said mobile station (col. 5, lines 40-55, col. 6, lines 32-43).

Regarding claim 23, Agrawal discloses the apparatus of claim 20 wherein said call control information comprises an indication of a dialed call from said mobile station (col. 6, lines 1-19).

Regarding claim 24, Agrawal discloses the apparatus of claim 20 wherein said code that exchanges call control information comprises code that exchanges call control information via an IP network (col. 18, lines 37-55).

Regarding claim 25, Agrawal discloses in a data communication network for supporting mobile users, apparatus for operating a mobile control function, said apparatus comprising: means for exchanging information with a mobile station via a

radio access network according to a radio access network protocol (col. 5, lines 40-55, col. 7, lines 19-41); means for exchanging call control information with a call agent associated with a call of said mobile station (col. 7, line 42-col. 8, line 40); and means for maintaining connection state information for said mobile station while said mobile station is handled via said radio access network (col. 8, lines 41-50).

Regarding claim 26, Agrawal discloses the apparatus of claim 25 further comprising: means for, upon receipt of a handoff request from said radio access network, transferring responsibility for maintaining connection state information to another mobile control function (col. 18, lines 37-55).

Regarding claim 27, Agrawal discloses the apparatus of claim 25 wherein said means for exchanging call control information comprises means for exchanging call control information via an IP network (col. 18, lines 37-55).

Regarding claim 28, Agrawal discloses in a data communication network for supporting mobile users, apparatus for operating a call agent, said apparatus comprising: means for exchanging call control information with a first mobile control function responsible for mobility management of a mobile station having a call handled by said call agent (col. 5, lines 40-55, col. 7, lines 19-41); and means for maintaining call state information for said mobile station (col. 8, lines 41-50).

Regarding claim 29, Agrawal discloses the apparatus of claim 28 further comprising: means for, upon a shift of responsibility for mobility management of said mobile station from said first mobile control function to a second mobile control function, exchanging call control information with said second mobile control function; and means

Art Unit: 2681

for continuing to maintain call state information for said mobile station while said second mobile control function maintains connection state information for said mobile station (col. 18, lines 37-55).

Regarding claim 30, Agrawal discloses the apparatus of claim 28 wherein said call control information comprises an indication of an inbound call for said mobile station (col. 5, lines 40-55, col. 6, lines 32-43).

Regarding claim 31, Agrawal discloses the apparatus of claim 28 wherein said call control information comprises an indication of a dialed call from said mobile station (col. 6, lines 1-19).

Regarding claim 32, Agrawal discloses the apparatus of claim 28 wherein said means for exchanging call control information comprises means for exchanging call control information via an IP network (col. 18, lines 37-55).

Regarding claim 35, Agrawal discloses the network of claim 33, wherein said connection state information is mobile registered or session active (col. 8, lines 41-50, col. 12, lines 32-61 and col. 14, line 51-col. 15, line 26).

Regarding claim 36, Agrawal discloses the network of claim 33, wherein said call state information is connected, call in progress, releasing, suspend or busy (col. 8, lines 41-50, col. 12, lines 32-61 and col. 14, line 51-col. 15, line 26).

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Friday (alternate Friday from 9:00am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 09/748,759

Page 12

Art Unit: 2681

you have questions on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at 866-217-9197 (toll-free).

Temica M. Davis  
Examiner  
Art Unit 2681

TMD  
April 15, 2004

  
**TEMICA M. DAVIS**  
**PATENT EXAMINER**

  
**ERIKA GARY**  
**PATENT EXAMINER**